

Annual Drinking Water Quality Report for 2022
Adelaar Water District/Village of Monticello Water Department
Monticello, New York 12701
Public Water Supply ID#5203337

INTRODUCTION

To comply with State regulations, the Adelaar Water District/Village of Monticello Water Department will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Michael Messenger, Town of Thompson Superintendent of Water & Sewer at (845)794-5280. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the first & third Tuesdays of each month at the Thompson Town Hall, 4052 Route 42, Monticello.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The 2 water sources are Kiamesha Lake and 3 wells located at the end of Park Avenue. During 2022, our system did not experience any restriction of our water sources. The water from Kiamesha Lake goes through a coagulation process, filtration disinfection, PH adjustment and corrosion control treatment. The treated water enters the distribution system and fills the 2 water tanks we have located in the village. The water from the wells goes through the same process except it does not have a coagulation process.

FACTS AND FIGURES

The total gallons pumped from the lake was 476,207,054 and 34,196,000 from the wells. The Water Department is allowed to take a maximum of 2,000,000 from the lake and 300,000 gallons from the wells per day. The average last year per day was 1,304,677 from the lake and 93,688 from the wells.

In 2022 the Village completed the lead and copper monitoring required under their reduced schedule of a minimum of 20 distribution system (residential) sampling sites every 3 years. The 90th percentile was the 18 highest results of the 20 samples collected in ascending order.

2022 Lead/Copper Results	Violation Yes/No	Date of Sample	Range Results	90 th %tile Results	Unit	MCLG	AL	Likely source of Contamination
Lead	No	06/16/22	<0.001-0.0028	0.001	mg/L	0	.015	Corrosion of household plumbing systems
Copper	No	06/16/22	0.027-0.148	0.105	mg/l	N/A	1.3	Corrosion of household plumbing systems

All elevated levels found in area homes are isolated incidents. In each case the results were indicative of an interior plumbing issue rather than a reflection of the source water. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants and young children. It is possible that lead levels at your home may be other than at other homes in the community as a result of materials used in your home's plumbing.

The Village of Monticello is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water you may wish to have your water tested.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by call the EPA's Safe Water Hotline (800-426-4791) or the Monticello Health Department at 794-2045.

Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement (0.36 NTU) for the year occurred on 9/26/2022. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3NTU. Turbidity monitors located at each filter continuously monitor turbidity during plant operations. Turbidity in excess of 5 NTU is just noticeable to the average person. Finished water turbidity from the lake is on average 0.15 NTU (nephelometric turbidity units) with a maximum of 0.30NTU. Average raw water from the lake is 3.10 NTU.

Contaminant	Violation (Yes/No)	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL,TT or AL)	Likely Source of Contamination
Total Organic Compounds (TOC's)							
Total Organic Compounds							
Raw Water	NO	Monthly	4.0-5.2	mg/l			
Finished Water	NO		1.2-2.6				
Synthetic Organic Contaminants							
Perfluorooctanoic Acid (PFOA)							
Well #1	NO	12/01/2022	2.4	ng/l	n/a ¹	MCL=10	Released into the environment from widespread use in commercial and industrial applications.
Well #2	NO	11/15/2022	2.38				
Well #3	NO	11/16/2022	3.65				
Plant	NO	11/15/2022	3.71				
Perfluorooctane sulfonic acid (PFOS)							
Well #1	NO	12/01/2022	2.2	ng/l	n/a ¹	MCL=10	Released into the environment from widespread use in commercial and industrial applications.
Well #2	NO	11/15/2022	2.4				
Well #3	NO	11/16/2022	3.32				
Plant	NO	11/15/2022	4.16				
1,4 Dioxane							
Well #1	NO	12/01/2022	<0.200	ng/l	n/a ¹	MCL=1	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites.
Well #2	NO	11/15/2022	<0.200				
Well #3	NO	11/16/2022	<0.200				
Plant	NO	08/11/2022	0.12				
Radioactive Contaminants							
Beta particle and photon activity from manmade radionuclides	NO	03/09/2016	4.58 ± 1.25 2.37 ± 1.08	pCi/L ⁹	0	MCL=50 ⁸	Decay of natural deposits and man- made emissions.
Gross alpha activity (including radium 226 but excluding radon and uranium)				pCi/L	0	MCL=15 ¹⁰	Erosion of natural deposits.
Well	NO	03/09/2016	4.75				
Plant	NO	03/09/2016	2.85				
Combined radium 226 and 228							
Well	NO	03/09/2022	1.719	pCi/L	0	MCL=5 ¹⁰	Erosion of natural deposits.
Plant	NO	03/09/2022	1.620				

Uranium Well Plant	NO NO	03/09/2022 03/09/2022	0.265 ± 0.011 0.213 ± 0.007	ug/l	0	MCL=30 ¹⁰	Erosion of natural deposits.
Inorganics							
Antimony Well Plant	NO NO	02/08/2017 04/11/2018	0.4 0.4	ug/l	6	MCL=6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Arsenic Well Plant	NO NO	04/05/2022 04/05/2022	<1.0 <1.0	ug/l ¹³	n/a	MCL=10 ¹⁴	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium Well Entry Well Lake Treatment Plant	NO NO NO NO	04/05/2022 04/05/2022 04/05/2022 04/05/2022	0.212 0.212 0.385 0.385	mg/l ¹⁵	2	MCL=2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Baryllium Well Plant	NO NO	04/11/2018 04/11/2018	0.49 0.3	ug/l	1.3	AL=1.3	Discharge from metal refineries and coil burning factories; Discharge from electrical, aerospace, and defense industries.
Cadmium Well Plant	NO NO	02/08/2017 04/05/2022	1.0 <1.0	ug/l	5	MCL=5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints.
Chromium Well Entry Well Lake Treatment Plant	NO NO NO NO	02/08/2017 04/05/2022 04/05/2022 04/05/2022	7 <2.0 <2.0 <2.0	ug/l	100	MCL=100	Naturally occurring or indicative of road salt contamination.
Cyanide Well Plant	NO NO	04/20/2021 04/05/2022	0.062 <10.0	ug/l	200	MCL=200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Fluoride Well Entry Well Lake Treatment Plant	NO NO NO NO	04/05/2022 Monthly 04/05/2022 Monthly	0.42 0.51 0.29 0.65	mg/l	n/a	MCL=2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.

Mercury Well Plant	NO NO	02/08/2017 04/05/2022	0.2 0.47	ug/l	2	MCL=2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
Nickel Well Entry Well Lake Treatment Plant	NO NO NO NO	04/05/2022 04/05/2022 04/05/2022 04/05/2022	2.5 2.5 <0.50 <0.50	ug/l	n/a	n/a	Natural Deposits.
Selenium Well Entry Well Lake Treatment Plant	NO NO NO NO	04/05/2022 02/08/2017 04/05/2022 04/05/2022	<2.0 8.5 <2.0 <2.0	ug/l	50	MCL=50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Thallium Well Plant	NO NO	02/08/2017 04/05/2022	0.3 <0.3	ug/l	2	MCL=2	Leaching from ore processing sites; Discharge from electronics, glass, and drug factories.
Inorganics – Nitrate							
Nitrate Well Plant	NO NO	07/12/2022 04/20/2021	1.207 0.223	mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Disinfection Byproducts							
Haloacetic Acids (mono--, di--, and trichloroacetic acid, and mono and di bromoacetic acid) 1 st Sampling Site 2 nd Sampling Site	 NO NO	 Quarterly	 Avg.=26.00 Range 26.7-33.8 21.6-26.3	 ug/l	 n/a	 MCL=60	 By product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs chloroform, bromodichloromethane, dibromochloromethane, and bromoform) 1 st Sampling Site 2 nd Sampling Site	 NO NO	 Quarterly	 Avg.=39.86 Range 39.2-57.1 23.7-36.9	 ug/l	 n/a	 MCL=80	 By product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.

Adelaar Water District Disinfection Byproducts							
Haloacetic Acids (mono--, di--, and trichloroacetic acid, and mono and di bromoacetic acid)	NO	Quarterly	Avg.=32.7 Range 27.0-35.7	ug/l	n/a	MCL=60	By product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Total Trihalomethanes (TTHMs chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	NO	Quarterly	Avg.=54.2 Range 32.7-69.0	ug/l	n/a	MCL=80	By product of drinking water disinfection needed to kill harmful organisms.

1 n/a means not applicable.

2 Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.

8 The State considers 50 pCi/l to be the level of concern for beta particles

9 Picocuries per liter (pCi/L) picocuries per liter is a measure of the radioactivity in water.

10 A MCL violation occurs when the annual composite of four quarterly samples or the average of the analysis of four quarterly samples exceeds the MCL.

13 Micrograms per liter (ug/l) or parts per billion (ppb).

15 Milligrams per liter (mg/l) or parts per million (ppm).

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or system must follow.

Non Defects (ND): Laboratory analysis indicates that the constituent is not present.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million-ppm)

Micrograms per liter (ug/l): Corresponds to one part of liquid in one million parts of liquid (parts per billion-ppb)

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water.

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

Information on Fluoride Addition

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is a very effective in preventing cavities when present in drinking water at an optimal dose of 0.7 mg/l(parts per million). The average fluoride for the plant is 0.65 and for the wells was 0.51. The State has not set an optimal range as of yet.

The New York State Department of Health has completed a source water assessment for this water system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the sub surface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source of water, it does not mean that the water delivered to consumers is, or will be, contaminated. The purpose of source water assessments is to provide resource managers with additional information for protecting source water in the future.

As mentioned previously in this report, our drinking water is derived from 3 wells. The table below demonstrates the contaminants to which each well is susceptible and the reason why

Well Name	Enteric Bacteria	Enteric viruses	Halogenated Solvents	Herbicides & pesticides	Metals	Nitrates	Petroleum Products	Protozoa	Other Industrial Organics	Reasons
Well #2	MH	NR	MH	MH	MH	MH	MH	MH	MH	2,4
Well #1	MH	NR	MH	MH	MH	MH	MH	MH	MH	2,4
Well #3	MH	H	MH	MH	MH	MH	MH	MH	MH	2,4

Susceptibility Ratings:

H – High

MH – Medium High

L - Low

NR – No Rating (not susceptible)

Reasons:

1. The well draws from an unknown aquifer of an unknown hydraulic conductivity
2. The well draws 100 gallons per minutes from an unknown aquifer

3. The close proximity of permitted discharge facilities**Industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government.
4. The well has a high sensitivity rating.
5. Significant chemical contamination has been document
6. The close proximity of a significant fertilizer user
7. The close proximity of an unregulated facility using hazardous substances

Please note that this report only details the possibility for contamination. Our water is tested regularly to ensure that the finished water coming into your home meets New York State drinking water standards. County and state health department will use this information to direct future source water protection activities. These may include water quality monitoring, a resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area can be obtained by contacting us.

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

Korean

이 보고서는 식수에 관한 중요한 정보를 담고 있습니다. 그것을 번역하거나, 그것을 이해하는 사람과 이야기하십시오.

Chinese

本报告包含有关饮用水的重要信息。跟某人翻译或理解它。

WHY SAVE WATER AND HOW TO AVOID WASTING IT

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid sever water use restrictions to that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity
- Turn off the tap when brushing your teeth
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons a year
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you can save more than 30,000 gallons a year

- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

1. System wide leak detection
2. Treated Kiamesha Lake

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. In 2012, the federal guidelines for lead and copper have changed over most of the meters.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.